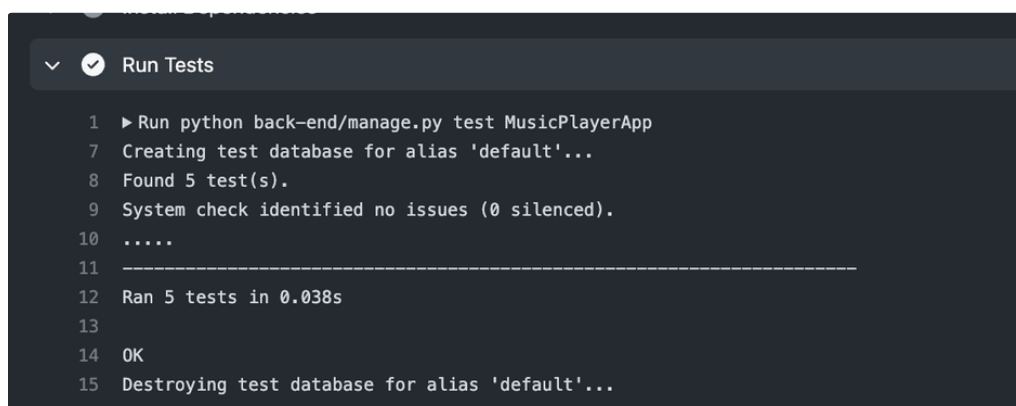
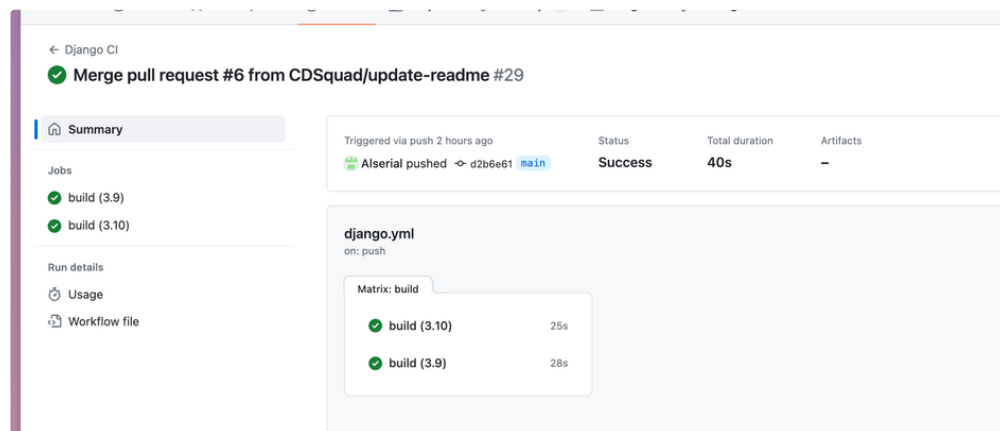


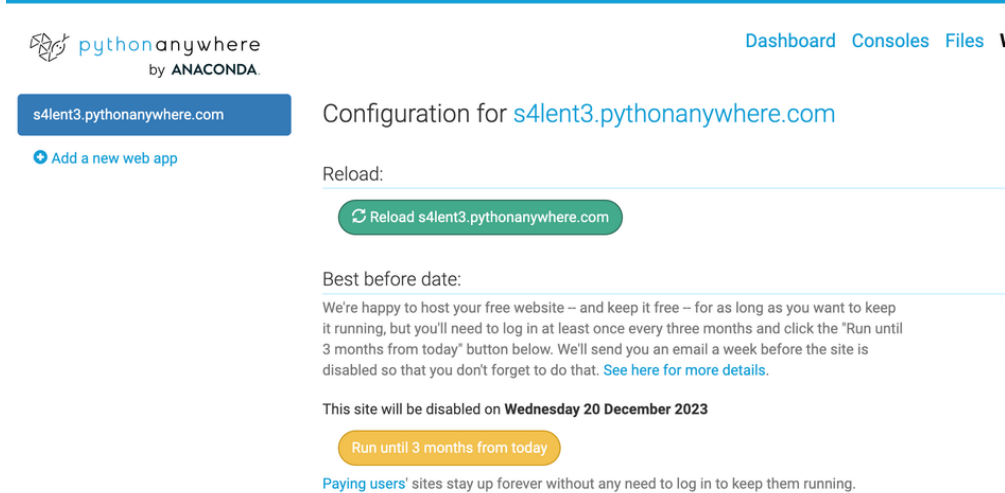
# Deployment

## Documentation for MusicPlayerApp

- 1. Introduction:** This document outlines the procedures for the continuous integration (CI) and deployment of the MusicPlayerApp, a Django-based application. The CI process is facilitated through GitHub Actions, and the application is composed of both backend and frontend components. The backend is manually deployed to PythonAnywhere due to the restrictions of the free plan, while the frontend is hosted on GitHub Pages.
- 2. Continuous Integration (CI):**
  - 2.1 Overview:** We utilize GitHub Actions for our CI pipeline. This system automatically triggers build and test processes upon pushes or pull requests to the "main" branch. The CI is configured to work with Python versions 3.9 and 3.10.
  - 2.2 Workflow:** The following steps are executed in our CI pipeline:
    - Current directory printout
    - Repository checkout
    - Python setup
    - Dependency installation
    - Unit testing
  - 2.3 Unit Testing:** Tests are written using Django's testing framework and cover various aspects of the application, including user management, music management, and file uploads. The tests ensure that all components of the application work as expected and that new changes do not introduce regressions.



3. **Deployment:** 3.1 **Backend:** The backend is hosted on PythonAnywhere. Due to the limitations of the free plan, continuous deployment (CD) is not feasible because it lacks SSH access. As such, updates to the backend are carried out manually. This approach is currently deemed sufficient as backend updates are infrequent.



pythonanywhere  
by ANACONDA

s4lent3.pythonanywhere.com

Dashboard Consoles Files

Configuration for s4lent3.pythonanywhere.com

Reload:

Reload s4lent3.pythonanywhere.com

Best before date:

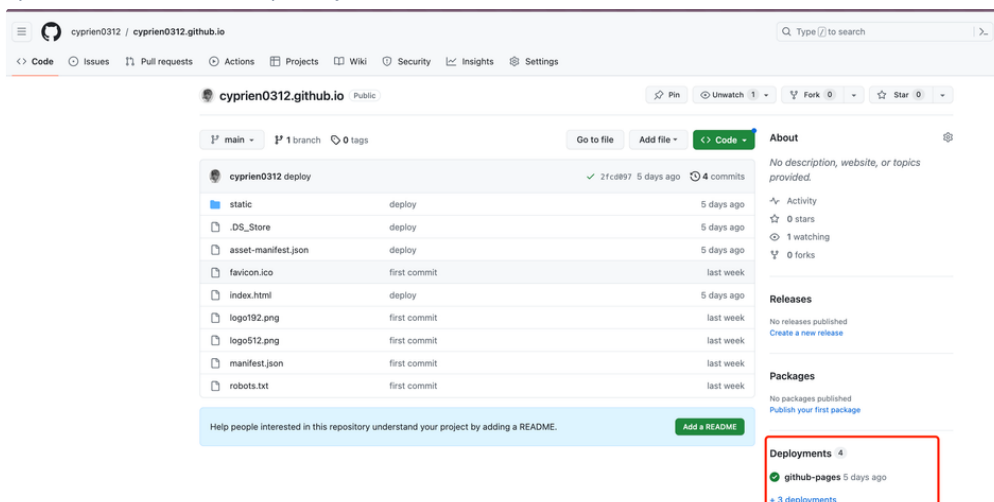
We're happy to host your free website – and keep it free – for as long as you want to keep it running, but you'll need to log in at least once every three months and click the "Run until 3 months from today" button below. We'll send you an email a week before the site is disabled so that you don't forget to do that. [See here for more details.](#)

This site will be disabled on **Wednesday 20 December 2023**

Run until 3 months from today

Paying users' sites stay up forever without any need to log in to keep them running.

- 3.2 **Frontend:** The frontend is statically hosted via GitHub Pages at <https://github.com/cyprien0312/cyprien0312.github.io>. The process is straightforward, as GitHub Pages directly serves the files pushed to the repository. The deployment updates automatically upon new commits to the repository.



cyprien0312 / cyprien0312.github.io

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

cyprien0312.github.io Public

main 1 branch 0 tags

Go to file Add file Code

cyprien0312 deploy ✓ 21c0997 5 days ago 4 commits

File	Type	Commit	Time
static	deploy	21c0997	5 days ago
.DS_Store	deploy	21c0997	5 days ago
asset-manifest.json	deploy	21c0997	5 days ago
favicon.ico	first commit	21c0997	last week
index.html	deploy	21c0997	5 days ago
logo192.png	first commit	21c0997	last week
logo512.png	first commit	21c0997	last week
manifest.json	first commit	21c0997	last week
robots.txt	first commit	21c0997	last week

Help people interested in this repository understand your project by adding a README. Add a README

Deployments 4

- github-pages 5 days ago

3 deployments

4. **Procedures:** 4.1 **Manual Backend Update:** When the backend needs an update, the following manual procedure is followed: a. A team member pulls the latest changes from the "main" branch. b. They log in to the PythonAnywhere console. c. They navigate to the application's directory. d. They upload the new files or changes via the PythonAnywhere file upload interface or update the code directly via the built-in editor. e. They reload the application to apply the changes.

- 4.2 **Frontend Update:** Frontend updates are automated. Any push or merge to the main branch of the [cyprien0312/cyprien0312.github.io](https://github.com/cyprien0312/cyprien0312.github.io) repository triggers a deployment. GitHub Pages automatically builds and deploys the new changes, making them live almost immediately.

#### 5. Future Considerations:

- Explore budget-friendly options for a paid PythonAnywhere plan to enable continuous deployment through SSH.
- Consider additional monitoring solutions to ensure the application's health and performance.